APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,169	03/29/2006	Christian Scheering	2003P07837WOUS	4121

22116   7590   12/22/2010
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EXAMINER
CHACKO, JOE

ART UNIT	PAPER NUMBER
2456	

MAIL DATE	DELIVERY MODE
12/22/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/574,169	SCHEERING, CHRISTIAN
	Examiner	Art Unit	
	JOE CHACKO	2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>05 October 2010</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>9-16 and 18-33</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>9-16 and 18-33</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

    1. ☐ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____.

    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the arguments filed on 10/5/2010. Claims 9-16
and 18-33 have been examined and are pending. Claims 30-33 have been newly
added.

Response to Arguments

2.   Applicant's arguments, see Remarks, filed 10/5/2010, with respect to the
rejection(s) of claim(s) 9-16, 18-29 under 35 U.S.C. 103 have been fully considered
and are persuasive. Therefore, the rejection has been withdrawn. However, upon
further consideration, a new ground(s) of rejection is made in view of the references
described below.

Examiner Comments

3.   The Examiner reiterates the suggestion that the Applicant amend their
independent claims to include other components of the invention so as to narrow the
scope of the claim. The claims as presently constituted are too broad to be allowable.
The Examiner would like to point out page 10-11 in the specification as consisting of
components that can be added to the claims to further prosecution.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

   (a) A patent may not be obtained though the invention is not identically disclosed or described as
   set forth in section 102 of this title, if the differences between the subject matter sought to be
   patented and the prior art are such that the subject matter as a whole would have been obvious
   at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negatived by the manner in which the invention
was made.

5.   **Claims 9-11 and 13-16, 18-25 and 27-29** are rejected under 35 U.S.C. 103(a) as
being unpatentable over Fay et al. (US Patent No. 7,062,480 B2, hereinafter "Fay") in
view of Simmons et al. (U.S. 2003/0072271 A1, hereinafter "Simmons")

As to **claim 9**, Fay discloses a method for verifying an availability of a server
comprising:

transmitting an availability request by a first client to the VPN server (column 4,
lines 61-67; the subscribers send a request for availability);

the first client receiving a response to the availability request (column 5, lines 1-2;
a real-time response from the airline servers are received);

the first client transmitting a message regarding an availability of the server to a
plurality of predefinable other clients (column 2, line 66-column 3, line3; flight availability
data from the real-time response may be stored in the cache database for a group of
subscribers is and is used to fulfill subsequent availability requests to the airline servers)
; and

preventing a transmission of any availability requests by the plurality of
predefinable other clients to the server (column 6, lines 15-17; this reduces a total
number of real-time requests and real-time responses that must be handled by the
system and the airlines servers)

However, Fay does not disclose the method wherein availability requests are not
send at least for prescribable period of time.

In an analogous art, Simmons does disclose the method wherein availability
requests are not send at least for prescribable period of time.([0009]; keepalive
messages are controlled by timer intervals that help congestion of messages in the
network)

At the time of the invention, it would have been obvious to a person of ordinary
skilled in the art to modify Fay by incorporating a predefined time at which clients make

network status requests as disclosed by Simmons. The motivation behind this
modification would be to help avoid message congestion in the network. (Simmons,
[0009])

As to **claim 10**, Fay-Simmons discloses the method as claimed in 9, wherein the
method is used for verifying the availability of the server in a packet-oriented
communication network (Fay, column 2, lines 43-58; the plurality of subscribers sent out
availability requests of which it is inherent that they are packets)

As to **claim 11**, Fay-Simmons discloses a method wherein data is transmitted
between the server and clients by a connectionless switch control (Fay, column 5, lines
59-67; the system transmits availability data from the server to the clients through the
cache system)

As to **claim 13**, Fay-Simmons does discloses a method wherein the client
informs only the other clients within a same subnetwork regarding the availability of the
server. (Fay, column 4, lines 65-column 5, line 3; the system sends availability request
responses to clients on the network)

As to **claim 14**, Fay-Simmons discloses the method as claimed in claim 9,
wherein the client executes the availability requests at a time which is predefined by a
timer . (Simmons, [0046]; the keepalive message is paced at periodic timing intervals
which is predefined)

As to **claim 15**, Fay-Simmons discloses the method, wherein the first timer is
reset to a predefinable value after the response to the availability request is received by
the first client. (Simmons, [0063]; the keepalive time gets reset after every predefined
time period)

As to **claim 16**, this is a computer program corresponding to method in claim 9.

Therefore it has been analyzed and rejected based upon method in claim 9.

As to **claim 18**, this is a system corresponding to method in claim 9. Therefore it has been analyzed and rejected based upon method in claim 9.

As to **claim 19**, Fay-Simmons discloses the method of claim 9 further comprising the first client checking to determine whether the server is at least able to respond to the availability request with an unavailability message if no confirmation message is received by the first client. (Simmons, [0009]; the negative acknowledgement from the consumer to the distributor)

As to **claim 21**, Fay-Simmons discloses the method of claim 9 further comprising the first client receiving keep alive data from the predefinable other clients.(Simmons, [0009]; keepalive messages are controlled by timer intervals that help congestion of messages in the network)

As to **claim 22**, Fay-Simmons discloses the method of claim 9 further comprising one of the predefinable other clients transmitting a collective availability request to the server if no multicast collective request has been received by that client within a predefined time period. (Fay, [0043]; each EMS servers in the list are adds its own network status data to the network status message and forwards after a delay time)

As to **claim 23**, this is a method corresponding to method in claim 21. Therefore it has been analyzed and rejected based upon method in claim 21.

As to **claim 24**, Fay-Simmons discloses the client of claim 18 further comprising a fourth device configured to monitor for receipt of a message from one of the predefinable other clients regarding availability of the server. (Fay, column 2, line 65-column 3, lines 8; the system monitors to see if any availability requests are received)

As to **claim 25**, this is a program corresponding to method in claim 21. Therefore it has been analyzed and rejected based upon method in claim 21.

As to **claim 27**, Fay-Simmons discloses the client of claim 18 wherein the first device is also the third device and the first device is a transmitter or a transmission mechanism.(Simmons, [0025]; the first port can be also be considered the third port can therefore the first port is transmitted bidirectionally),

As to **claim 28**, Fay-Simmons discloses the client of claim 18 wherein the first device, second device and third device are interconnected portions of the client. (Simmons, [0025]; the RTD daemon communicates on one thread bidirectionally to all the respective consumer ports and therefore are interconnected)

As to **claim 29**, Fay-Simmons discloses the client of claim 18 further comprising a fourth device configured to monitor for reception of a message from a prescribable further client about server availability (Fay, column 2, line 65-column 3, lines 8; the system monitors to see if any availability requests are received) and also configured to prevent transmission of an availability request to the server (Fay, column 6, lines 15-17; this reduces a total number of real-time requests and real-time responses that must be handled by the system and the airlines servers) at least for a prescribable time interval after receipt of such a message. (Simmons, [0009]; keepalive messages are controlled by timer intervals that help congestion of messages in the network)

6.   **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fay in view of Simmons further in view of Chen et al.(U.S. Patent Pub. No. 2002/016964 Al)

As to **claim 12**, Fay-Simmons does not explicitly discloses the transmitting of a multicast message to the other clients in the network
In an analogous art, Chen explicitly discloses the method wherein message regarding the availability of the server is transmitted to the plurality of predefinable other

clients using a multicast message to inform other clients in the cluster about server availability information. ([0046] , [0056]; wherein when a node fails the cluster node sends information about the failure to other nodes using a multicast message).

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify the method disclosed by Fay-Simmons as modified with the method disclosed by Chen et al. to disclose a method of transmitting messages to another peer entities in the network using multicast messages. The motivation behind this modification is to provide high availability and reliability among the nodes. (Chen, page 4, [0056])

7.   **Claims 20 and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fay in view of Simmons further in view of Nakahara(U.S. Patent Pub. No. 2004/0111492 AI, hereinafter "Nakahara")

As to **claim 20**, Fay-Simmons discloses the method of claim 9 however does not disclose further comprising the first client transmitting a negative availability message to the predefinable other clients if the server provided an unavailability message or if the server did not respond to the availability request within a predetermined amount of time after the availability request was sent to the server.

Nakahara does disclose the method wherein comprising the first client transmitting a negative availability message to the predefinable other clients if the server provided an unavailability message or if the server did not respond to the availability request within a predetermined amount of time after the availability request was sent to the server. ([0050]; "the proxy server receives the request for obtaining the contents from the server"…"if the reply message is not returned from the web server and the time is out, the error message is transmitted to the client")

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify the method disclosed by Fay-Simmons as modified with the method disclosed by Nakahara to disclose a method of transmitting messages to another peer entities in the network using multicast messages. The rationale behind this

modification is that all the claimed elements were known in the prior art and one skilled
in the art could have combined the elements as claimed by known methods with no
change in their respective functions, and the combination would have yielded
predictable results to one of ordinary skill in the art at the time of the invention.

As to **claim 26**, this is a program corresponding to method in claim 20. Therefore
it has been analyzed and rejected based upon method in claim 20.

8.   **Claims 30-33** are rejected under 35 U.S.C. 103(a) as being unpatentable over
Simmons in view of Fay.

As to **claim 30**, Simmons discloses a method for verifying an availability of a
server comprising:
        checking for a receipt of a message regarding a transmission of a server
keepalive test by a first client within a first predetermined period of time ([0057]; the
keepalive message are sent and if the keepalive message is ignored then a negative
acknowledgement message is formed at regular intervals);
        if no message regarding the transmission of the keepalive test is received by the
first client within the first predetermined period of time .([0009]; keepalive messages are
controlled by timer intervals that help congestion of messages in the network)
        However, Simmons does not explicitly disclose the first client transmitting a
message regarding a collective request to a plurality of predefineable other clients
transmitting an availability request by the first client to the server, the availability
request to the server comprising data of the predefineable other clients that responded
to the message regarding the collective requests within a second predetermined period
of time
preventing transmission of any availability requests by the plurality of predefinable other
clients to the server for at least a prescribable period of time
after a third predetermined period of time or after receipt of a response to the availability
request sent to the server, the first client transmitting a message regarding an

availability of the server to the predefinable other clients that responded to the message
regarding the collective requests within the second predetermined period of time.

In an analogous art, Fay discloses the method wherein the first client transmitting
a message regarding a collective request to a plurality of predefineable other clients
(column 2, line 66-column 3, line3; flight availability data from the real-time response
may be stored in the cache database for a group of subscribers is and is used to fulfill
subsequent availability requests to the airline servers) ;

transmitting an availability request by the first client to the server, the availability
request to the server comprising data of the predefineable other clients that responded
to the message regarding the collective requests within a second predetermined period
of time(column 2, line 66-column 3, line3; flight availability data from the real-time
response may be stored in the cache database for a group of subscribers is and is used
to fulfill subsequent availability requests to the airline servers) ;

preventing transmission of any availability requests by the plurality of
predefinable other clients to the server for at least a prescribable period of time (column
6, lines 15-17; the flight availability data reduces a total number of real-time requests
and real-time responses that must be handled by the system and the airlines servers)

after a third predetermined period of time or after receipt of a response to the
availability request sent to the server, the first client transmitting a message regarding
an availability of the server to the predefinable other clients that responded to the
message regarding the collective requests within the second predetermined period of
time (column 6, lines 20-38; the flights that are non-polled flights will be included in the
availability request after a real-time request) .

At the time of the invention, it would have been obvious to a person of ordinary
skilled in the art to modify Simmons by incorporating a predefined time in which
availability requests are sent and response are waited for as disclosed by Fay. The
rationale behind this modification is that all the claimed elements were known in the
prior art and one skilled in the art could have combined the elements as claimed by
known methods with no change in their respective functions, and the combination would

have yielded predictable results to one of ordinary skill in the art at the time of the
invention.

As to **claim 31**, Simmons-Fay discloses the method as claimed in claim 30
further comprising the first client checking for responses to the message regarding the
collective request from the predefineable other clients within the second predetermined
period of time. (Simmons, [0057]; the RTD daemon broadcasts keepalive messages at
regular time intervals and waits for the reply to that message)

As to **claim 32**, Simmons-Fay discloses the method as claimed in claim 30
wherein the message regarding a transmission of a server keepalive test is a multicast
collective request from a client that intends to directly send a keepalive request to the
server (Simmons, [0057]; the RTD daemon broadcasts the keepalive broadcasts to
ports art regular intervals).

As to **claim 33**, Simmons-Fay discloses the method of claim 30 wherein the
preventing of the transmission of any availability requests by the plurality of predefinable
other clients to the server for at least a prescribable period of time is comprised of the
predefineable other clients that responded to message regarding the collective requests
within the second predetermined period of time checking whether the message
regarding an availability of the server is received from the first client within a fourth
predetermined period of time (Fay, (column 6, lines 15-17; the flight availability data
reduces a total number of real-time requests and real-time responses that must be
handled by the system and the airlines servers)

Conclusion

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to JOE CHACKO whose telephone number is (571)270-
3318. The examiner can normally be reached on Monday-Friday 8:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. C./

Examiner, Art Unit 2456

/Rupal D. Dharia/

Supervisory Patent Examiner, Art Unit 2400